



Product designation

Power contactor

Product type designation

BF195

Contact characteristics

Number of poles	Nr.	4
Rated insulation voltage U _i IEC/EN	V	1000
Rated impulse withstand voltage U _{imp}	kV	8
Operational frequency	min	Hz 25
	max	Hz 400
IEC Conventional free air thermal current I _{th}	A	275
Operational current I _e	AC-1 (≤40°C)	A 275
	AC-1 (≤55°C)	A 230
	AC-1 (≤70°C)	A 200
	AC-3 (≤440V ≤55°C)	A 195
	AC-4 (400V)	A 95
Rated operational current AC-3 (T≤55°C)	230V	A 195
	400V	A 195
	415V	A 195
	440V	A 195
	500V	A 184
	690V	A 165
	1000V	A 85
Rated operational power AC-1 (T≤40°C)	230V	kW 104
	400V	kW 181
	500V	kW 199
	690V	kW 312
IEC max current I _e in DC1 with L/R ≤ 1ms with 1 poles in series	≤24V	A 275
	48V	A 275
	75V	A 275
	110V	A 120
	220V	A –
IEC max current I _e in DC1 with L/R ≤ 1ms with 2 poles in series	≤24V	A 275
	48V	A 275
	75V	A 275
	110V	A 170
	220V	A 150
IEC max current I _e in DC1 with L/R ≤ 1ms with 3 poles in series	≤24V	A 275
	48V	A 275
	75V	A 275

	110V	A	170
	220V	A	150
	330V	A	150
IEC max current Ie in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	A	275
	48V	A	275
	75V	A	275
	110V	A	275
	220V	A	350
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	A	275
	48V	A	275
	75V	A	180
	110V	A	90
	220V	A	–
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	A	275
	48V	A	275
	75V	A	180
	110V	A	140
	220V	A	100
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	A	275
	48V	A	275
	75V	A	180
	110V	A	160
	220V	A	140
	330V	A	100
IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	A	275
	48V	A	275
	75V	A	180
	110V	A	160
	220V	A	160
	330V	A	160
	460V	A	100
Short-time allowable current for 10s (IEC/EN60947-1)		A	1560
Protection fuse			
	gG (IEC)	A	315
	aM (IEC)	A	250
Making capacity (RMS value)		A	1658
Breaking capacity at voltage			
	440V	A	1658
	500V	A	1326
	690V	A	1377
Resistance per pole (average value)		mΩ	0.18
Power dissipation per pole (average value)			
	Ith	W	13
	AC-3	W	6.7
Tightening torque for terminals			
	min	Nm	18
	max	Nm	18
	min	Ibin	159
	max	Ibin	159

Tightening torque for coil terminal

min	Nm	0.8
max	Nm	1

Power terminal protection according to IEC/EN 60529

IP00

Mechanical features

Operating position

normal allowable	Vertical plan ±30°
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Fixing

Screw

Weight

g	4000
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Operations

Mechanical life

cycles	10000000
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Electrical life

cycles	1000000
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Safety related data

Performance level B10d according to EN/ISO 13489-1

rated load	cycles	1000000
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EMC compatibility

yes

AC coil operating

Rated AC voltage at 50/60Hz, 60Hz

min	V	250
max	V	500

AC operating voltage

of 50/60Hz coil powered at 50Hz
pick-up

min	%Us	80 Us min
max	%Us	110 Us max

drop-out

max	%Us	≤70 Us min
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of 50/60Hz coil powered at 60Hz
pick-up

min	%Us	80 Us min
max	%Us	110 Us max

drop-out

max	%Us	≤70 Us min
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AC average coil consumption at 20°C

of 50/60Hz coil powered at 50Hz

in-rush	VA	160...230
holding	VA	1.5...3.0

of 50/60Hz coil powered at 60Hz

in-rush	VA	160...230
holding	VA	1.5...3.0

of 60Hz coil powered at 60Hz

in-rush	VA	160...230
holding	VA	1.5...3.0

Dissipation at holding ≤20°C 50Hz

W	1.5...3.0
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DC coil operating

DC rated control voltage

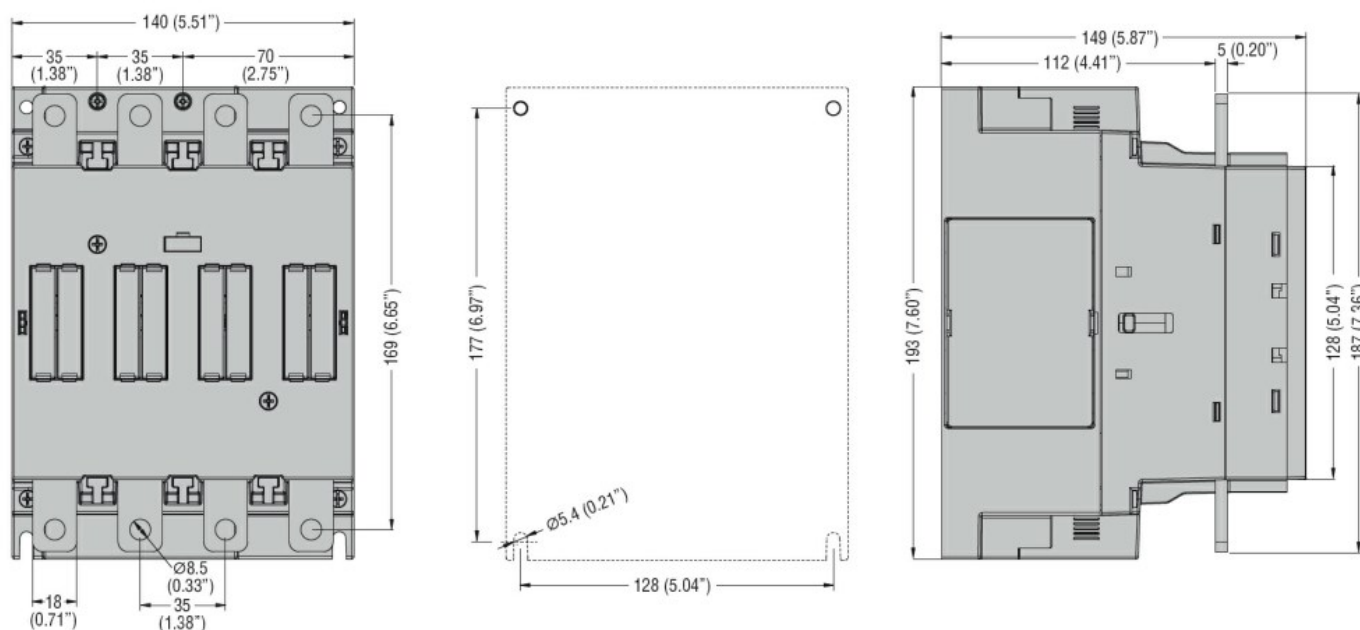
min	V	250
max	V	500

DC operating voltage

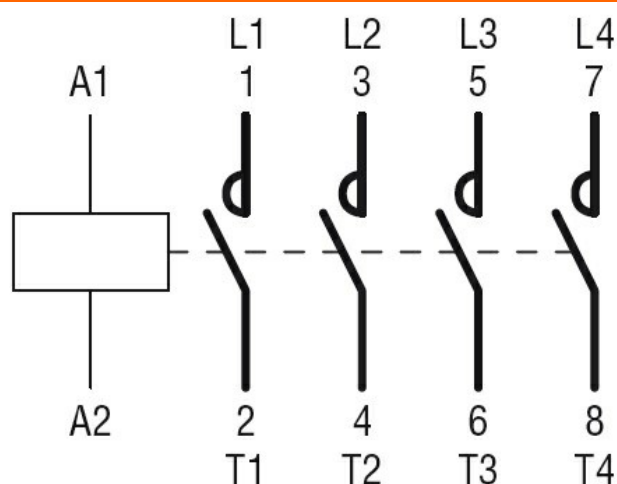
pick-up

min	%Us	85 Us min
max	%Us	110 Us max

drop-out		max	%Us	≤70 Us min	
Average coil consumption ≤20°C		in-rush holding	W W	160...230 1.5...3.0	
Max cycles frequency					
Mechanical operation			cycles/h	1000	
Operating times					
Average time for Us control in AC		Closing NO	min max	ms ms	50 100
		Opening NO	min max	ms ms	35 75
UL technical data					
Yielded mechanical performance for three-phase AC motor		200/208V 220/230V 460/480V 575/600V	HP HP HP HP	60 75 150 150	
General USE					
Contactor		AC current	A	275	
Short-circuit protection fuse, 600V High fault		Short circuit current Fuse rating Fuse class	kA A	100 400 J	
Standard fault		Short circuit current Fuse rating Fuse class	kA A	10 400 RK5	
Ambient conditions					
Temperature		Operating temperature	min max	°C °C	-40 70
		Storage temperature	min max	°C °C	-50 80
Max altitude			m	3000	
Resistance & Protection					
Pollution degree				3	
Dimensions					



Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN/BS 60947-1

IEC/EN/BS 60947-4-1

UL 60947-1

UL 60947-4-1

Certificates

cULus

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching